

IN THE CLAIMS

Please cancel claims 1-5 without prejudice or disclaimer to the subject matter contained therein.

Please add the following new claims:

1. A liquid-crystal active-matrix display device comprising:


picture element electrodes; and
thin film transistors, each including a gate, source and drain electrode and each corresponding to one of said picture element electrodes, for switching voltages applied to each corresponding picture element electrode;


said thin film transistors and corresponding picture element electrodes being arranged in a matrix format on a substrate;


said thin film transistors being connected to gate lines and source lines at intersections thereof, the gate lines each connecting a plurality of said gate electrodes and the source lines each connecting a plurality of said source electrodes;


said drain electrodes being connected to said picture element electrodes;


said gate electrodes and non-corresponding adjacent picture element electrodes overlapping at edge portions thereof

to form additional capacitors, with a first insulating film and a second insulating film being interposed therebetween. 

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~~1~~. A liquid-crystal active-matrix display device according to claim ¹~~8~~, wherein the gate electrodes are made of tantalum, the first insulating film is made of tantalum pentoxide and the second insulating film is made of silicon nitride. 

*A¹
cont* ³
~~2~~. A liquid-crystal active-matrix display device according to claim ¹~~8~~, wherein each gate line is made in one piece connecting each corresponding gate electrode, and wherein each source line is made in one piece connecting each corresponding source electrode. 

⁴
~~3~~. A liquid crystal active-matrix display device according to claim ¹~~8~~, wherein the edge portion of the gate electrode which overlays the picture element electrode functions as an additional-capacitor electrode for an adjacent picture element electrode. 

⁵
~~4~~. A liquid crystal active-matrix display device according to claim ¹~~8~~, wherein the first insulating film is an oxidized part of each gate electrode. 

⁶
~~EX~~1. A liquid crystal active-matrix display device according to claim ¹~~8~~, wherein the second insulating film is a chemically vapor deposited part of the substrate. ~~EX~~

¹⁷
~~EX~~12. A device, as claimed in claim ¹~~8~~, wherein said gate electrode is made of a non-transparent material. ~~EX~~

⁸
~~EX~~13. A device, as claimed in claim ³~~8~~, wherein each gate line overlaps the periphery of a plurality of adjacent picture element electrodes to thereby minimize light from leaking from each of said picture element electrodes. ~~EX~~

cont

⁹
~~EX~~14. A liquid crystal active-matrix display apparatus comprising:

¹
a plurality of parallel source lines disposed on a substrate in a first direction;

¹
a plurality of parallel gate lines disposed on said substrate in a second direction, perpendicular to said first direction;

¹
a plurality of thin film transistors, each including a gate, source, and drain electrode, disposed at intersections of said parallel gate lines and said parallel source lines;

¹
a plurality of picture element electrodes disposed on said substrate in a matrix fashion so as to each correspond to one of said plurality of thin film transistors, each of said

thin film transistors switching applied voltages to drive each of said corresponding picture element electrodes;

⁹
~~9~~ said gate electrodes, formed of a non-transparent material, of each of said transistors, and a non-corresponding adjacent picture element electrode overlapping at edge portions thereof to thereby form an additional capacitor electrode at said overlapped edge portions. ~~6~~

A cont
¹⁰
~~10~~ 15. An apparatus, as claimed in claim ⁹~~14~~, further comprising first and second insulating layers, separating each said overlapped edge portion of said picture element electrodes and gate electrodes. ~~6~~

¹¹
~~11~~ 16. An apparatus, as claimed in claim ¹⁰~~15~~, wherein the gate electrodes are made of tantalum, the first insulating film is made of tantalum pentoxide, and the second insulating film is made of silicon nitride.--

¹²
~~12~~ 17. An apparatus, as claimed in claim ⁹~~14~~, wherein each gate line is made in one piece connecting a plurality of corresponding gate electrodes, and wherein each source line is made in one piece connecting a plurality of corresponding source electrodes. ~~6~~

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~~13~~. An apparatus, as claimed in claim ¹⁰~~15~~, wherein the first insulating film is an oxidized part of each gate electrode. ~~13~~

14
~~14~~. An apparatus, as claimed in claim ¹⁰~~15~~, wherein the second insulating film is a chemically vapor deposited part of the substrate. ~~14~~

15
~~15~~. An apparatus, as claimed in claim ¹²~~17~~, wherein each gate line overlaps the periphery of a plurality of adjacent picture element electrodes to thereby minimize light from leaking from each of said picture element electrodes. ~~15~~

[Signature]
REMARKS

Claims 1-3 have been rejected under 35 USC 112, second paragraph. This rejection is overcome due to the cancellation of claims 1-3. Further, new claims 6-20 are in strict compliance with 35 USC 112, second paragraph.

Claims 4 and 5 have been rejected because features of oxidizing the surface of each of the gate electrodes and of plasma chemical vapor deposition do not further limit the structure of the liquid crystal display device. This rejection is overcome due to the cancellation of claims 4 and 5. Further, this rejection is deemed inapplicable to new claims 6-20.